

### **CITY OF NEW BEDFORD**

### **Department of Public Infrastructure**

Ronald H. Labelle (C. O. ) w-s Commissioner (C. Wall

CODE HOUSE

July 21, 2003

Mr. Stephen Wood Environmental Science Services, Inc. 401 Wampanoag Trail, Suite 400 East Providence, Rhode Island 02915 Superfund Records Center
SITE: SULLIANS LENGE
BREAK: 7.6

OTHER:

Reference: Sullivan's Ledge Monthly Report

Dear Steve,

Enclosed please find the June 2003 operating reports for the Sullivan's Ledge Groundwater Treatment Facility.

Analytical data for effluent samples collected on June 4 and 26 are enclosed.

Our more detailed reports will begin with July's monthly report. Should you have any questions regarding these reports please feel free to contact me.

>me4

James J. Ride

Sincerely:

Superintendent of Water

Cc: James R Heckathorne, O'Brien & Gere David Lederer, U.S. EPA Evelinia Vaughan, MA DEP

1 Negus Way
East Freetown, MA
508-763-2231
508-763-4494 (fax)
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SDMS DocID

560836

#### SULLIVAN'S LEDGE MONTHLY SUPPLEMENTAL REPORT

#### June 2003

- $12^{th}$  10 am Process went down. Condensation from uv/ox system dripping on leak detector. In response, portable fan was set-up and wooden blocks were placed on floor to keep the leak detector off the floor. At  $\sim 1:15$  pm the plant went back on line.
- 25<sup>th</sup> Process went down at 8:52 pm due to collection trench pump faults pumps were reset test was ok unknown as to cause of failure, although power surge or power loss may have occurred. Plant back on-line 8:20 am on 6/26.

## SULLIVAN'S LEDGE SUPERFUND SITE Ground Water Treatment Plant

Performance Data

Month   Miller   Full Full (Gal)   My Full   My Full   My Full   My Full   My Full   My Full   My My Full   My	G	Ground water Treatment Plant							•	Summary	
1   JUNE   7618   6119   4   Mail (rale)   A   A   A   A   A   A   A   A   A		Month/	Influent	Effluent	Day	Pilling and H	Chen	icals Used	gals	City	
1         JUNE         76134         6972         48         6.0         31         152         18         319         Process on line.         3 day avg.           2         JUNE         76513         70255         49         6.4         37         158         18         232         Process on line.           3         JUNE         76518         70091         49         6.1         37         158         18         232         Process on line.           5         JUNE         76118         70091         49         6.2         38         165         18         399         Process on line.           6         JUNE         76482         69861         49         6.2         38         152         18         322         Process on line.         3day avg.           7         JUNE         76482         69861         49         6.2         38         152         18         322         Process on line.         3day avg.           8         JUNE         75482         69861         49         6.2         38         152         18         322         Process on line.         3day avg.           10         JUNE         75548         70210 <td><math>\Omega N</math></td> <td>2003</td> <td></td> <td></td> <td></td> <td></td> <td>Acid</td> <td></td> <td></td> <td></td> <td>Noted to the second sec</td>	$\Omega N$	2003					Acid				Noted to the second sec
2         JUNE         76185         86762         48         6.4         30         186         19         337         Process on line.           3         JUNE         76513         70255         49         6.4         37         158         18         232         Process on line.           4         JUNE         77651         71018         49         6.1         37         158         18         232         Process on line.           5         JUNE         7618         70991         49         6.2         38         165         18         359         Process on line.           6         JUNE         76482         69861         49         6.2         38         152         18         322         Process on line.         3day avg.           9         JUNE         76482         69861         49         6.2         37         154         17         224         Process on line.         3day avg.           9         JUNE         75543         69961         49         6.2         37         154         17         224         Process on line.         3day avg.           10         JUNE         75543         6961         49	1										
3	2	JUNE	75185	69762	48	6.4	30				+
5         JUNE         76118         70091         49         6.2         38         165         18         359         Process on line.           6         JUNE         76482         69861         49         6.2         38         152         18         332         Process on line.         3day avg.           7         JUNE         76482         69861         49         6.2         38         152         18         332         Process on line.         3day avg.           8         JUNE         76482         69861         49         6.2         38         152         18         332         Process on line.         3day avg.           9         JUNE         75548         70210         49         6.2         37         154         17         224         Process on line.           10         JUNE         75543         69961         49         6.2         34         151         18         232         Process on line.           11         JUNE         75547         6963         48         6.2         38         154         17         539         Process on line.           12         JUNE         75331         66090         46	3		76513	70255	49	6.4	37	158	18	232	
6 JUNE 76482 69861 49 6.2 38 152 18 322 Process on line. 3 day avg. 7 JUNE 76482 69861 49 6.2 38 152 18 322 Process on line. 3 day avg. 8 JUNE 76482 69861 49 6.2 38 152 18 322 Process on line. 3 day avg. 9 JUNE 75482 70210 49 6.2 37 154 17 224 Process on line. 3 day avg. 10 JUNE 75543 69961 49 6.2 34 151 18 232 Process on line. 11 JUNE 75257 69633 48 6.2 38 154 17 539 Process on line. 12 JUNE 56974 51732 36 6.1 38 128 15 172 Process on line. 13 JUNE 71331 66090 46 6.1 37 164 16 243 Process on line. 14 JUNE 71331 66090 46 6.1 37 164 16 243 Process on line. 3 day avg. 15 JUNE 71331 66090 46 6.1 37 164 16 243 Process on line. 3 day avg. 16 JUNE 71331 66090 45 6.1 37 164 16 243 Process on line. 3 day avg. 17 JUNE 71331 66090 45 6.1 37 164 16 243 Process on line. 3 day avg. 18 JUNE 71331 66090 45 6.1 37 164 16 243 Process on line. 3 day avg. 19 JUNE 71331 66090 45 6.1 37 164 16 243 Process on line. 3 day avg. 19 JUNE 71331 66090 45 6.1 37 164 16 243 Process on line. 3 day avg. 10 JUNE 71331 66090 45 6.1 37 164 16 243 Process on line. 3 day avg. 11 JUNE 71331 66090 45 6.1 37 164 16 243 Process on line. 3 day avg. 11 JUNE 71331 66090 45 6.1 37 164 16 243 Process on line. 12 JUNE 71331 66090 45 6.0 36 150 18 209 Process on line. 13 JUNE 71331 66090 45 6.0 36 150 18 209 Process on line. 14 JUNE 7548 65016 45 6.0 37 151 18 Process on line. 15 JUNE 75178 64444 45 6.1 32 150 16 Process on line. 17 JUNE 75178 64444 45 6.1 32 150 16 Process on line. 18 JUNE 75171 50400 35 6.3 32 152 18 795 Process on line. 20 JUNE 75111 50400 35 6.3 32 152 18 795 Process on line. 21 JUNE 57111 50400 35 6.3 32 152 18 795 Process on line. 22 JUNE 57111 50400 35 6.3 32 152 18 795 Process on line. 23 JUNE 6600 64801 45 6.0 34 150 16 171 Process on line. 24 JUNE 6600 64801 45 6.0 34 150 16 171 Process on line. 25 JUNE 63156 60390 42 6.0 34 150 16 171 Process on line. 26 JUNE 63156 60390 42 6.0 34 150 16 171 Process on line. 27 JUNE 63156 60390 42 6.0 34 150 16 171 Process on line.	4		77651	71018	49	6.1	37	158	18	232	Process on line.
Total Process on the Company of	5		76118	70091	49	6.2	38	165	-18	359	Process on line.
7         JUNE         76482         69861         49         6.2         38         152         18         322         Process on line. 3 day avg.           9         JUNE         75948         70210         49         6.2         38         152         18         322         Process on line. 3 day avg.           10         JUNE         75543         69961         49         6.2         34         151         18         232         Process on line.           11         JUNE         75547         69633         48         6.2         38         154         17         539         Process on line.           12         JUNE         56974         51732         36         6.1         38         128         15         172         Process on line.           13         JUNE         71331         66090         46         6.1         37         164         16         243         Process on line. 3 day avg.           15         JUNE         71331         66090         46         6.1         37         164         16         243         Process on line. 3 day avg.           15         JUNE         71331         66090         46         6.1         37 </td <td>6</td> <td></td> <td>76482</td> <td>69861</td> <td>49</td> <td>6.2</td> <td>38</td> <td>152</td> <td>18</td> <td>322</td> <td>Process on line, 3 day avg.</td>	6		76482	69861	49	6.2	38	152	18	322	Process on line, 3 day avg.
8         JUNE         76482         69861         49         6.2         38         152         18         322         Process on line. 3 day avg.           10         JUNE         75548         70210         49         6.2         37         154         17         224         Process on line.           11         JUNE         75543         69961         49         6.2         34         151         18         232         Process on line.           11         JUNE         75527         69633         48         6.2         38         154         17         539         Process on line.           12         JUNE         71331         66090         46         6.1         37         164         16         243         Process on line. 3 day avg.           14         JUNE         71331         66090         46         6.1         37         164         16         243         Process on line. 3 day avg.           15         JUNE         71331         66090         46         6.1         37         164         16         243         Process on line. 3 day avg.           16         JUNE         72548         65016         45         6.0         36<	7		76482	69861	49	6.2	38	152		322	
9 JUNE 75948 70210 49 6.2 37 154 17 224 Process on line.  10 JUNE 75543 69961 49 6.2 34 151 18 232 Process on line.  11 JUNE 75257 69633 48 6.2 38 154 17 539 Process on line.  12 JUNE 56974 51732 36 6.1 38 128 15 172 Process on line.  13 JUNE 71331 66090 46 6.1 37 164 16 243 Process on line. 3 day avg.  14 JUNE 71331 66090 46 6.1 37 164 16 243 Process on line. 3 day avg.  15 JUNE 71331 66090 46 6.1 37 164 16 243 Process on line. 3 day avg.  16 JUNE 71331 66090 46 6.1 37 164 16 243 Process on line. 3 day avg.  17 JUNE 68456 64097 45 6.0 36 160 18 209 Process on line. 3 day avg.  18 JUNE 70965 68201 47 6.0 37 151 18 Process on line.  19 JUNE 70178 64444 45 6.1 32 150 16 Process on line.  20 JUNE 75111 50400 35 6.3 32 152 18 795 Process on line. 3 day avg.  21 JUNE 57111 50400 35 6.3 32 152 18 795 Process on line. 3 day avg.  21 JUNE 57111 50400 35 6.3 32 152 18 795 Process on line. 3 day avg.  22 JUNE 57111 50400 35 6.3 32 152 18 795 Process on line. 3 day avg.  21 JUNE 57111 50400 35 6.3 32 152 18 795 Process on line. 3 day avg.  22 JUNE 57111 50400 35 6.3 32 152 18 795 Process on line. 3 day avg.  23 JUNE 57111 50400 35 6.3 32 152 18 795 Process on line. 3 day avg.  24 JUNE 75575 64294 45 6.0 34 154 16 194 Process on line.  25 JUNE 33661 31515 22 6.4 20 128 8 195 Process on line.  26 JUNE 63156 60390 42 6.0 34 154 16 202 Process on line.  27 JUNE 63156 60390 42 6.0 34 150 16 171 Process on line. 3 day avg.  28 JUNE 63156 60390 42 6.0 34 150 16 171 Process on line. 3 day avg.  29 JUNE 63156 60390 42 6.0 34 150 16 171 Process on line. 3 day avg.  29 JUNE 66025 62974 44 6.0 38 169 16 171 Process on line.  20 JUNE 66025 62974 44 6.0 38 169 16 171 Process on line.  20 JUNE 66025 62974 44 6.0 38 169 16 171 Process on line.  20 JUNE 66025 62974 44 6.0 38 169 16 171 Process on line.	8		76482	69861	49	6.2	38	152	18	322	
11				70210	49	6.2	37	154	17	224	
11				69961	49	6.2	34	151	18	232	Process on line.
13	11	JUNE	75257	69633	48	6.2	38	154	17	539	
14			56974	51732	36	6.1	38	128	15	172	
15         JUNE         71331         66090         46         6.1         37         164         16         243         Process on line. 3 day avg.           16         JUNE         72548         65016         45         6.0         36         160         18         209         Process on line.           17         JUNE         68456         64097         45         6.0         38         187         17         255         Process on line.           18         JUNE         70965         68201         47         6.0         37         151         18         Process on line.           19         JUNE         76178         64444         45         6.1         32         150         16         Process on line.           20         JUNE         57111         50400         35         6.3         32         152         18         795         Process on line. 3 day avg.           21         JUNE         57111         50400         35         6.3         32         152         18         795         Process on line. 3 day avg.           22         JUNE         57111         50400         35         6.3         32         152         18			71331	66090	46	6.1	37	164	16	243	Process on line, 3 day avg.
15				66090	46	6.1	37	164	16	243	Process on line. 3 day avg.
16         JUNE         72548         65016         45         6.0         36         160         18         209         Process on line.           17         JUNE         68456         64097         45         6.0         38         187         17         255         Process on line.           18         JUNE         70965         68201         47         6.0         37         151         18         Process on line.           19         JUNE         76178         64444         45         6.1         32         150         16         Process on line.           20         JUNE         57111         50400         35         6.3         32         152         18         795         Process on line. 3 day avg.           21         JUNE         57111         50400         35         6.3         32         152         18         795         Process on line. 3 day avg.           22         JUNE         57111         50400         35         6.3         32         152         18         795         Process on line. 3 day avg.           23         JUNE         57511         50400         35         6.0         34         154         16				66090	46	6.1	37	164	16	243	
18         JUNE         70965         68201         47         6.0         37         151         18         Process on line.           19         JUNE         76178         64444         45         6.1         32         150         16         Process on line.           20         JUNE         57111         50400         35         6.3         32         152         18         795         Process on line. 3 day avg.           21         JUNE         57111         50400         35         6.3         32         152         18         795         Process on line. 3 day avg.           22         JUNE         57111         50400         35         6.3         32         152         18         795         Process on line. 3 day avg.           23         JUNE         57111         50400         35         6.3         32         152         18         795         Process on line. 3 day avg.           24         JUNE         75532         64718         45         6.0         29         162         16         202         Process on line.           25         JUNE         33661         31515         22         6.4         20         128         8 </td <td></td> <td></td> <td></td> <td>65016</td> <td>45</td> <td>6.0</td> <td>36</td> <td>160</td> <td>. 18</td> <td>209</td> <td></td>				65016	45	6.0	36	160	. 18	209	
19						6.0	38	187	17	255	Process on line.
20         JUNE         57111         50400         35         6.3         32         152         18         795         Process on line. 3 day avg.           21         JUNE         57111         50400         35         6.3         32         152         18         795         Process on line. 3 day avg.           22         JUNE         57111         50400         35         6.3         32         152         18         795         Process on line. 3 day avg.           23         JUNE         75532         64718         45         6.0         29         162         16         202         Process on line.           24         JUNE         75575         64294         45         6.0         34         154         16         194         Process on line.           25         JUNE         33661         31515         22         6.4         20         128         8         195         Process on line.           26         JUNE         66901         64801         45         6.0         35         154         16         202         Process on line.           27         JUNE         63156         60390         42         6.0         34				68201	47	6.0	37	151	18		Process on line.
21         JUNE         57111         50400         35         6.3         32         152         18         795         Process on line. 3 day avg.           22         JUNE         57111         50400         35         6.3         32         152         18         795         Process on line. 3 day avg.           23         JUNE         75532         64718         45         6.0         29         162         16         202         Process on line.           24         JUNE         75575         64294         45         6.0         34         154         16         194         Process on line.           25         JUNE         33661         31515         22         6.4         20         128         8         195         Process on line.           26         JUNE         66901         64801         45         6.0         35         154         16         202         Process on line.           27         JUNE         63156         60390         42         6.0         34         150         16         171         Process on line. 3 day avg.           29         JUNE         63156         60390         42         6.0         34					45	6.1	32	150	16		Process on line.
22         JUNE         57111         50400         35         6.3         32         152         18         795         Process on line. 3 day avg.           23         JUNE         75532         64718         45         6.0         29         162         16         202         Process on line.           24         JUNE         75575         64294         45         6.0         34         154         16         194         Process on line.           25         JUNE         33661         31515         22         6.4         20         128         8         195         Process on line.           26         JUNE         66901         64801         45         6.0         35         154         16         202         Process went down, Back on line           27         JUNE         63156         60390         42         6.0         34         150         16         171         Process on line.           28         JUNE         63156         60390         42         6.0         34         150         16         171         Process on line. 3 day avg.           29         JUNE         63156         60390         42         6.0         34							32	152	18	795	Process on line. 3 day avg.
23         JUNE         75532         64718         45         6.0         29         162         16         202         Process on line.           24         JUNE         75575         64294         45         6.0         34         154         16         194         Process on line.           25         JUNE         33661         31515         22         6.4         20         128         8         195         Process went down, Back on line.           26         JUNE         66901         64801         45         6.0         35         154         16         202         Process on line.           27         JUNE         63156         60390         42         6.0         34         150         16         171         Process on line. 3 day avg.           28         JUNE         63156         60390         42         6.0         34         150         16         171         Process on line. 3 day avg.           29         JUNE         63156         60390         42         6.0         34         150         16         171         Process on line. 3 day avg.           30         JUNE         66025         62974         44         6.0 <t< td=""><td></td><td></td><td></td><td></td><td></td><td>6.3</td><td>32</td><td>152</td><td>18</td><td>795</td><td>Process on line. 3 day avg.</td></t<>						6.3	32	152	18	795	Process on line. 3 day avg.
24         JUNE         75575         64294         45         6.0         34         154         16         194         Process on line.           25         JUNE         33661         31515         22         6.4         20         128         8         195         Process went down, Back on line           26         JUNE         66901         64801         45         6.0         35         154         16         202         Process on line.           27         JUNE         63156         60390         42         6.0         34         150         16         171         Process on line. 3 day avg.           28         JUNE         63156         60390         42         6.0         34         150         16         171         Process on line. 3 day avg.           29         JUNE         63156         60390         42         6.0         34         150         16         171         Process on line. 3 day avg.           30         JUNE         66025         62974         44         6.0         38         169         16         157         Process on line.           TOTAL         2075404         1902667         1324         184.1 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>152</td><td>18</td><td>795</td><td>Process on line. 3 day avg.</td></t<>								152	18	795	Process on line. 3 day avg.
25         JUNE         33661         31515         22         6.4         20         128         8         195         Process went down, Back on line           26         JUNE         66901         64801         45         6.0         35         154         16         202         Process went down, Back on line           27         JUNE         63156         60390         42         6.0         34         150         16         171         Process on line. 3 day avg.           28         JUNE         63156         60390         42         6.0         34         150         16         171         Process on line. 3 day avg.           29         JUNE         63156         60390         42         6.0         34         150         16         171         Process on line. 3 day avg.           30         JUNE         66025         62974         44         6.0         38         169         16         157         Process on line.           TOTAL         2075404         1902667         1324         184.1         1042         4654         503         8653									16	202	Process on line.
26         JUNE         66901         64801         45         6.0         35         154         16         202         Process treit down, back on line.           27         JUNE         63156         60390         42         6.0         34         150         16         171         Process on line. 3 day avg.           28         JUNE         63156         60390         42         6.0         34         150         16         171         Process on line. 3 day avg.           29         JUNE         63156         60390         42         6.0         34         150         16         171         Process on line. 3 day avg.           30         JUNE         66025         62974         44         6.0         38         169         16         157         Process on line.           TOTAL         2075404         1902667         1324         184.1         1042         4654         503         8653								154	16	194	Process on line.
27         JUNE         63156         60390         42         6.0         34         150         16         171         Process on line. 3 day avg.           28         JUNE         63156         60390         42         6.0         34         150         16         171         Process on line. 3 day avg.           29         JUNE         63156         60390         42         6.0         34         150         16         171         Process on line. 3 day avg.           30         JUNE         66025         62974         44         6.0         38         169         16         157         Process on line.           TOTAL         2075404         1902667         1324         184.1         1042         4654         503         8653								128	8	195	Process went down, Back on line
28         JUNE         63156         60390         42         6.0         34         150         16         171         Process on line. 3 day avg.           29         JUNE         63156         60390         42         6.0         34         150         16         171         Process on line. 3 day avg.           30         JUNE         66025         62974         44         6.0         38         169         16         157         Process on line.           TOTAL         2075404         1902667         1324         184.1         1042         4654         503         8653										202	Process on line.
29         JUNE         63156         60390         42         6.0         34         150         16         171         Process on line. 3 day avg.           30         JUNE         66025         62974         44         6.0         38         169         16         157         Process on line.           TOTAL         2075404         1902667         1324         184.1         1042         4654         503         8653									16	171	
30 JUNE 66025 62974 44 6.0 38 169 16 157 Process on line.  TOTAL 2075404 1902667 1324 184.1 1042 4654 503 8653								150	16	171	Process on line. 3 day avg.
TOTAL         2075404         1902667         1324         184.1         1042         4654         503         8653										171	Process on line. 3 day avg.
1011 1012 1031 0033	30			62974	44	6.0	38	169	16	157	Process on line.
		TOTAL	<u>2075404</u>	<u>1902667</u>	<u>1324</u>	<u>184.1</u>	<u>1042</u>	<u>4654</u>	<u>503</u>		
	r da id Liberii									P\$ 5.4	

### SULLIVAN'S LEDGE SUPERFUND SITE

**Ground Water Treatment Plant** 

Water levels

Day	Month/ 2003	BEI - 1	OBG -1	OBG-2	BEI - 2	OBG - 3	BEI-3		Interim Well 1	Interim Well 2
1	JUNE						teres e disentir disentir di inte		30274662L-8-5366	
2	JUNE	69.7	69.4	59.8	55.8	48.8	66.4	12.9	23.4	25.1
3	JUNE	69.8	69.3	59.5	55.8	48.8	66.3	12.8	23.2	25.1
4	JUNE	69.7	69.3	59.6	55.6	48.7	66.1	13.0	23.0	24.9
5	JUNE	69.7	69.4	59.6	55.7	48.7	66.3	13.0	22.5	24.6
6	JUNE	69.9	69.4	59.4	55.7	48.8	66.3	13.0	22.5	24.7
7	JUNE		•				;			
8	JUNE	,								
9	JUNE	69.8	69.4	58.9	55.6	48.5	66.3	13.0	22.2	24.4
10	JUNE	69.9	69.7	58.6	55.5	45.6	66.2	12.9	22.1	24.2
11	JUNE	69.9	69.5	58.4	55.6	45.3	66.1	12.7	22.5	24.1
12	JUNE	69.9	69.4	58.3	55.5	45.2	66.1	12.8	22.5	24.3
13	JUNE	69.8	69.4	59.5	55.7	51.8	66.3	12.7	22.5	24.6
14	JUNE									
15	JUNE									
16	JUNE	69.8	69.3	58.9	69.4	51.8	66.2	12.9	21.8	24.0
17	JUNE	69.9	69.2	58.8	71.0	52.7	66.2	12.9	21.8	23.8
18	JUNE	69.8	69.2	58.7	71.1	52.7	66.3	12.7	22.1	23.9
19	JUNE	69.9	69.3	58.4	72.6	52.8	66.4	15.3	21.9	24.0
20	JUNE	69.9	69.3	57.5	71.8	52.8	66.1	15.3	21.8	23.9
21	JUNE									
22	JUNE	-								
23	JUNE	69.8	69.4	58.5	72.8	53.0	67.0	15.7	22.3	24.2
24	JUNE	69.9	69.5	58.1	68.6	52.8	66.9	15.3	22.0	24.1
25	JUNE	69.9	69.5	58.1	68.7	52.8	66.9	11.1	21.8	23.4
26	JUNE	70.2	71.8	60.1	72.0	57.9	68.9	12.3	22.8	24.1
27	JUNE	70.3	69.6	58.1	68.5	52.8	67.3	11.7	22.5	23.9
28	JUNE									
29	JUNE									
30	JUNE	69.9	69.5	57.4	68.1	52.8	66.7	11.0	22.3	23.5



#### ANALYTICAL REPORT

Prepared for:
City of New Bedford
1105 Shawmut Avenue
New Bedford, MA 02746

Project:

Sullivan's Ledge

ETR:

0306155

**Report Date:** 

July 10, 2003

#### **Certifications and Accreditations**

Massachusetts MA030
Connecticut PH-0141
New Hampshire 220602
Rhode Island 64
New Jersey MA015
Maine MA030
New York 11627
Louisiana 03090
Army Corps of Engineers
Department of the Navy
Florida E87814

nelae

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#### **CASE NARRATIVE**

#### Woods Hole Group Environmental Laboratories

ETR:

0306155

Project:

Sullivan's Ledge

All analyses were performed according to Woods Hole Group's documented Standard Operating Procedures (SOPs), within holding time and with appropriate quality control measures except where noted. Blank correction of results is not performed in the laboratory for any parameter. Soil/sediment samples are reported on a dry weight basis unless otherwise noted.

#### Volatile Organics by GC/MS

- Sample Final Eff. (0306155-02) has a recovery for the surrogate Toluene-d8 outside the acceptable QC range of 87-111% at 40% due to sample matrix interference.
- 2. The Laboratory Control Sample, VW062603L01, had the compounds Trichlorofluoromethane and Acrolein recovered above the upper recovery limit of 130%, at 138% and 183%, respectively, which represents a high bias. These compounds were not detected in the associated sample.

The enclosed results of analyses are representative of the samples as received by the laboratory. Woods Hole Group makes no representations or certifications as to the method of sample collection, sample identification, or transporting/handling procedures used prior to the receipt of samples by Woods Hole Group. To the best of my knowledge, the information contained in this report is accurate and complete.

Title: Proj. Mgv Date: 7-10-03

#### Volatile Organics by GC/MS



Client: City of New Bedford

Project: Sullivan's Ledge

Client ID: Final Eff

Case: N/A
Matrix: Water

N/A

SDG:

Lab Code: MA00030

ETR: 0306155

Lab ID: 0306155-02

Associated Blank: VW062603B01

Concentration Units: µg/L

						Concentration	Olitis. μg/L	
Data Callant	Details 1			mple	Final			
Date Collected	Date Received	Date Analyzed	. Amoi	unt (ml)	Volume (ml)	Dilution Factor	Analyst	
06/26/03	06/26/03	06/26/03		5	5	1	MLB	
Parameter	V min 4 1 m. mps dente adapte v. do a	Result		Param	eter	The state of the s	Result	
Chloromethane		8.8.		1,2-Dic	hloroethane		2.0 U	
Vinyl chloride		2.0	U	Trichlo	roethene		12	
Bromomethane		18		1,2-Dic	hloropropane	,	2.0 U	
Chloroethane		3.0		Bromod	lichloromethane		2.0 U	
Trichlorofluorome		2.0	U		oethylvinyl ether		2.0 U	
1,1-Dichloroethene	•	1.0	U		isobutyl ketone (M	(IBK)	2.0 U	
Acrolein	and the second second	20	U		cis-1,3-Dichloropropene			
Acetone		50		Toluene			2.0 U	
Carbon disulfide		2.0	U		3-Dichloropropene	)	0.50 U	
Methylene chloride		5.0	U		richloroethane		2.0 U	
Methyl tert-butyl e		2.0	U	2-Hexa			2.0 U	
trans-1,2-Dichloro		2.2			loroethene		2.0 U	
1,1-Dichloroethane	)	2.0	U		ochloromethane		2.0 U	
Vinyl acetate		2.0	U		penzene		2.0 U	
2-Butanone (MEK		5.8		Ethylbe	nzene		2.0 U	
cis-1,2-Dichloroeth	nene	31		p/m-Xy	lene		4.0 U	
Chloroform		2.0	U	o-Xyler	ne 🗎		2.0 U	
1,1,1-Trichloroetha		2.0	U	Styrene			2.0 U	
Carbon tetrachloric	le	2.0	U	Bromof	form		1.4 J	
Benzene		2.0	U	1,1,2,2-	Tetrachloroethane		2.0 U	

cis-1,3-Dichloropropene and trans-1,3-Dichloropropene are reported to the method detection limit to meet reporting limits.

Surrogate	% Recovery		Acceptance Range (%)
Dibromofluoromethane	113		86-116
Toluene-d8	40	§	87-111
4-Bromofluorobenzene	81		79-112

<sup>§ -</sup> Surrogate value outside of acceptable range.

J - Estimated value, below quantitation limit.

U - The analyte was analyzed for but not detected at the sample specific level reported.



## Blank Volatile Organics by GC/MS

City of New Bedford Client: Project:

Sullivan's Ledge

Client ID: Blank Case:

Matrix:

N/A Water SDG: N/A Lab Code: MA00030

ETR: 0306155

Lab ID: VW062603B01 Associated Blank: N/A

						Concentration	Units: μg/L
Deta Callested	Data Barata da		Sample		Final		
Date Collected	Date Received	Date Analyzed	Amount (	ml)	Volume (ml)	Dilution Factor	Analyst
N/A	N/A	06/26/03	5		5	. 1	MLB
Parameter		Result	P	arame	ter		Result
Chloromethane		2.0	U 1	,2-Dicl	nloroethane		2.0 U
Vinyl chloride		2.0	Ū T	richlor	oethene	**************************************	2.0 U
Bromomethane		5.0	<u>U</u> 1	,2-Dic	loropropane		2.0 U
Chloroethane		2.0	U B	romod	ichloromethane		- 2.0 U
Trichlorofluorome		2.0	<u>U</u> 2	-Chlor	oethylvinyl ether		2.0 U
1,1-Dichloroethene	,	1.0	U N	1ethyl	isobutyl ketone (M	IBK)	2.0 U
Acrolein		20		is-1,3-	Dichloropropene		0.50 U
Acetone		5.0		oluene			2.0 U
Carbon disulfide		2.0			3-Dichloropropene		0.50 U
Methylene chloride		5.0			ichloroethane		2.0 U
Methyl tert-butyl e		2.0	U 2	-Hexar	ione		2.0 U
trans-1,2-Dichloro		2.0	U T	etrach	oroethene		2.0 U
1,1-Dichloroethane	,	2.0	U D	ibrom	ochloromethane		2.0 U
Vinyl acetate		2.0	U C	hlorob	enzene		2.0 U
2-Butanone (MEK)		2.0	U E	thylbe	nzene	444.4	2.0 U
cis-1,2-Dichloroeth	iene	2.0	U p	m-Xy	lene	· · · · · · · · · · · · · · · · · · ·	4.0 U
Chloroform	`	2.0	U o	-Xylen	e		2.0 U
1,1,1-Trichloroetha		2.0	U S	tyrene			2.0 U
Carbon tetrachloric	le	2.0	U B	romof	orm		2.0 U
Benzene		2.0	U I	,1,2,2-	Tetrachloroethane	****	2.0 U

cis-1,3-Dichloropropene and trans-1,3-Dichloropropene are reported to the method detection limit to meet reporting limits.

	• .	Acceptance
Surrogate	% Recovery	Range (%)
Dibromofluoromethane	103	86-116
Toluene-d8	97	87-111
4-Bromofluorobenzene	96	79-112

U - The analyte was analyzed for but not detected at the sample specific level reported.



## Laboratory Control Sample Volatile Organics by GC/MS

Client: Project: City of New Bedford

Sullivan's Ledge

Water

Client ID: Case:

Laboratory Control Sample N/A

Matrix:

SDG:

Lab Code: MA00030

ETR: 0306155

Lab ID: VW062603L01

Associated Blank: VW062603B01

Concentration Units: µg/L

Date Collected	Date Received	Date Analyzed	Sample Amount (ml)	Final Volume (ml)	Dilution Factor	Analyst
N/A	N/A	06/26/03	5	5	ı	MLB

Parameter	Conc.	% Recovery	% Recovery Limits
Chloromethane	. 20	99	70-130
Vinyl chloride	21	103	70-130
Bromomethane	25	125	70-130
Chloroethane	22	108	70-130
Trichlorofluoromethane	28		70-130
1,1-Dichloroethene	20	103	70-130
Acrolein	37	183ª	70-130
Acetone	21	107	70-130
Carbon disulfide	20	99	70-130
Methylene chloride	19	96	70-130
Methyl tert-butyl ether (MTBE)	20	100	70-130
trans-1,2-Dichloroethene	20	102	70-130
I,I-Dichloroethane	23	114	70-130
Vinyl acetate	20	101	70-130
2-Butanone (MEK)	20	102	70-130
cis-1,2-Dichloroethene	22	110	70-130
Chloroform	21	105	70-130
1,1,1-Trichloroethane	21	106	70-130
Carbon tetrachloride	22	108	70-130
Benzene	22	108	70-130
1,2-Dichloroethane	21	103	70-130
Trichloroethene	21	105	70-130
1,2-Dichloropropane	21	107	70-130
Bromodichloromethane	21	104	70-130
2-Chloroethylvinyl ether	21	106	70-130
Methyl isobutyl ketone (MIBK)	22	112	70-130
cis-1,3-Dichloropropene	22	108	70-130
Toluene	21	104	70-130
trans-1,3-Dichloropropene	21	106	70-130
1,1,2-Trichloroethane	22	108	70-130
2-Hexanone	22	112	70-130
Tetrachloroethene	22	108	70-130
Dibromochloromethane	21	106	70-130



## Laboratory Control Sample Volatile Organics by GC/MS

Client:

City of New Bedford

Project:

Sullivan's Ledge

Client ID:

**Laboratory Control Sample** 

Case: Matrix: N/A SDG:

Water

Lab Code: MA00030

ETR: 0306155

Lab ID: VW062603L01

Associated Blank: VW062603B01

Concentration Units: µg/L

-				Sample	Final		
1	Date Collected	Date Received	Date Analyzed	Amount (ml)	Volume (ml)	Dilution Factor	Analyst
1	N/A	N/A	06/26/03	5	5	1	MLB

Parameter	Conc.	% Recovery	Recovery Limits
Chlorobenzene	21	104	70-130
Ethylbenzene	21	104	70-130
p/m-Xylene	43	108	70-130
o-Xylene	21	104	70-130
Styrene	21		70-130
Bromoform	20	102	70-130
1,1,2,2-Tetrachloroethane	22	108	70-130

*	, ·	Acceptance
Surrogate	% Recovery	Range (%)
Dibromofluoromethane	102	86-116
Toluene-d8	100	87-111
4-Bromofluorobenzene	100	79-112

<sup>a</sup> - Value outside of QC Limits. N/A - Not Applicable

Concentrations reported as calculated values, which includes rounding for significant figures. Percent recoveries and RPD values are calculated from the unrounded result.

### Polychlorinated Biphenyls by GC/ECD



Client:

Case:

City of New Bedford

Project:

Sullivan's Ledge

N/A

SDG:

N/A

ETR: 0306155

Lab ID: 0306155-01

Lab Code: MA00030

Associated Blank: PW070103B07

Concentration Units: µg/L

Client ID: Matrix:

Water

Final Eff

Sample Final Dilution Date Collected Date Received | Date Extracted | Date Analyzed Amount (ml) Volume (ml) Factor Analyst 06/26/03 06/26/03 07/01/03 07/05/03 1000 10 NLJr

Parameter	Result
Aroclor 1016	0.50 U
Aroclor 1221	0.50 U
Aroclor 1232	0.50 U
Aroclor 1242	0.50 U
Aroclor 1248	0.50 U
Aroclor 1254	0.50 U
Aroclor 1260	0.50 U

Sumagata	9/ D	Acceptance
Surrogate	% Recovery	Range (%)
Tetrachloro-meta-xylene	84	30-150
Decachlorobiphenyl	55	30-150

U - The analyte was analyzed for but not detected at the sample specific level reported.



## Quality Control Results Polychlorinated Biphenyls by GC/ECD

Client:

City of New Bedford

Project:

Sullivan's Ledge

ETR: 0306155

Case:

N/A

SDG:

Lab ID: PW070103B07

N/A

Associated Blank: N/A

Lab Code: MA00030

Client ID:

Method Blank

Water Matrix:

Concentration Units: µg/L

Date Collected	Date Received	Date Extracted	Date Analyzed	Sample Amount (ml)	Final Volume (ml)	Dilution Factor	Analyst
N/A	N/A	07/01/03	07/05/03	1000	10	1	NLJr

Parameter	Result
Aroclor 1016	0.50 U
Aroclor 1221	0.50 U
Aroclor 1232	0.50 U
Aroclor 1242	0.50 U
Aroclor 1248	0.50 U
Aroclor 1254	0.50 U
Aroclor 1260	0.50 U

Surrogate	% Recovery	Acceptance Range (%)
Tetrachloro-meta-xylene	77	30-150
Decachlorobiphenyl	85	30-150

U - The analyte was analyzed for but not detected at the sample specific level reported.



#### **Laboratory Control Sample** Polychlorinated Biphenyls by GC/ECD

Client:

City of New Bedford

Project:

Sullivan's Ledge

ETR: 0306155

Case:

N/A

N/A

Lab ID: PW070103L08

Lab Code: MA00030

Client ID:

SDG: **Laboratory Control Sample** 

Associated Blank: PW070103B07

Matrix: Water

Concentration Units: µg/L

Date Collected	Date Received	Date Extracted	Analyst
N/A	N/A	07/01/03	NLJr

			% Recovery
Parameter	Conc.	% Recovery	Limits
Aroclor 1016	9.4	95	70-130
Aroclor 1260	9.4	94	70-130

Acceptance Surrogate % Recovery Range (%) Tetrachloro-meta-xylene 30-150 Decachlorobiphenyl 84 30-150

N/A - Not Applicable

Concentrations reported as calculated values, which includes rounding for significant figures. Percent recoveries and RPD values are calculated from the unrounded result.

### Woods Hole Group

### **Chain-of-Custody Record**

375 Paramount Drive Raynham, MA 02767

TEL: (508) 822-9300 FAX: (508) 822-3288

0306/55 PAGE 1 OF 1

1 / L

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### ANALYTICAL REPORT

Prepared for:

City of New Bedford 1105 Shawmut Avenue New Bedford, MA 02746

**Project:** 

Sullivan's Ledge

ETR:

0306034

Report Date:

June 27, 2003

#### **Certifications and Accreditations**

Massachusetts MA030
Connecticut PH-0141
New Hampshire 220602
Rhode Island 64
New Jersey MA015
Maine MA030
New York 11627
Louisiana 03090
Army Corps of Engineers
Department of the Navy
Florida E87814

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### **CASE NARRATIVE**

#### **Woods Hole Group Environmental Laboratories**

ETR:

0306034

Project:

Sullivan's Ledge

All analyses were performed according to Woods Hole Group's documented Standard Operating Procedures (SOPs), within holding time and with appropriate quality control measures except where noted. Blank correction of results is not performed in the laboratory for any parameter. Soil/sediment samples are reported on a dry weight basis unless otherwise noted.

#### Volatile Organics by GC/MS

- 1. Sample Final Eff. (0306034-02) has a recovery for the surrogate Toluene-d8 outside the acceptable QC range of 87-111% at 42% due to sample matrix interference.
- 2. Laboratory Control Sample, VW060903L14, has recoveries for Trichlorofluoromethane and Acrolein outside the acceptable QC range of 70-130% at 150% and 64%, respectively. Neither Trichlorofluoromethane nor Acrolein were not detected in the associated sample.

The enclosed results of analyses are representative of the samples as received by the laboratory. Woods Hole Group makes no representations or certifications as to the method of sample collection, sample identification, or transporting/handling procedures used prior to the receipt of samples by Woods Hole Group. To the best of my knowledge, the information contained in this report is accurate and complete.

Approved by

Woods Hole Group Environmental Laboratories

Date:

6-27-03

### Volatile Organics by GC/MS



Client: City of New Bedford

Project: Sullivan's Ledge

Client ID: Final Eff.

Case: N/A

Matrix: Water

N/A

SDG:

Lab Code: MA00030

ETR: 0306034

Lab ID: 0306034-02

Associated Blank: VW060903B17

Concentration Units: µg/L

Date Collected	Date Received	Date Analyzed	Sample Amount (ml)	Final Volume (ml)	Dilution Factor		
06/04/03	06/04/03	06/09/03		volume (mi)	Dilution Factor	Analyst	
	00/04/03		5	)	1	MLB	
Parameter		Result	Param	eter		Result	
Chloromethane		55	1,2-Dio	chloroethane		2.0 U	
Vinyl chloride		2.0	U Trichlo	roethene		2.0 U	
Bromomethane		8.4	1,2-Dic	chloropropane		2.0 U	
Chloroethane		6.1	Bromo	dichloromethane		2.0 U	
Trichlorofluorome		2.0	U 2-Chlo	roethylvinyl ether		2.0 U	
1,1-Dichloroethene		1.0	U Methyl	isobutyl ketone (M	(IBK)	3.0	
Acrolein		20	U cis-1,3-	cis-1,3-Dichloropropene			
Acetone		58		Toluene			
Carbon disulfide		2.0	U trans-1	trans-1,3-Dichloropropene			
Methylene chloride		5.0	U 1,1,2-T		2.0 U		
Methyl tert-butyl e		2.0	U 2-Hexa	none		2.0 U	
trans-1,2-Dichloroe		2.0		loroethene		· 2.0 U	
1,1-Dichloroethane	)	2.0		ochloromethane		2.0 U	
Vinyl acetate		2.0		benzene		2.0 U	
2-Butanone (MEK)		5.3	Ethylbe			2.0 U	
cis-1,2-Dichloroeth	nene	2.0		p/m-Xylene			
Chloroform		2.0		o-Xylene			
1,1,1-Trichloroetha		2.0	•	<b>3</b> · · · · · ·			
Carbon tetrachloric	le	2.0	U Bromo			2.0 U	
Benzene		2.0	U 1,1,2,2	-Tetrachloroethane		2.0 U	

cis-1,3-Dichloropropene and trans-1,3-Dichloropropene are reported to the method detection limit to meet reporting limits.

	•		Acceptance
Surrogate	% Recovery		Range (%)
Dibromofluoromethane	112		86-116
Toluene-d8	42	§	87-111
4-Bromofluorobenzene	84		79-112

§ - Surrogate value outside of acceptable range.

 $\boldsymbol{U}$  - The analyte was analyzed for but not detected at the sample specific level reported.



#### Blank Volatile Organics by GC/MS

Client:

City of New Bedford

Project: Sullivan's Ledge

Water

Client ID:

Matrix:

Blank Case: N/A

SDG:

N/A

Lab Code: MA00030

ETR: 0306034

Lab ID: VW060903B17

Associated Blank: N/A

Concentration Units:

			Sample	Final	Concentration	Units: µg/L
Date Collected	Date Received	Date Analyzed	Amount (ml)		Dilution Factor	Analyst
N/A	N/A	06/09/03	. 5	5	1	MLB
Parameter		Result	Para	ımeter		Result
Chloromethane		2.0	U 1,2-	Dichloroethane		2.0 U
Vinyl chloride		2.0	U Tric	nloroethene	y 1000 1 1000 1000 1000 1000 1000 1000	2.0 U
Bromomethane	,	5.0	U 1,2-	Dichloropropane		2.0 U
Chloroethane		2.0	U Bron	nodichloromethane		2.0 U
Trichlorofluorome		2.0	U 2-Cl	loroethylvinyl ether	•	2.0 U
1,1-Dichloroethene	2	1.0	U Metl	yl isobutyl ketone (	MIBK)	2.0 U
Acrolein		20		,3-Dichloropropene		0.50 U
Acetone		5.0	U Tolu			2.0 U
Carbon disulfide		2.0	U trans	-1,3-Dichloroproper	ne	0.50 U
Methylene chloride		5.0		-Trichloroethane		2.0 U
Methyl tert-butyl e		2.0	U 2-H6	xanone		2.0 U
trans-1,2-Dichloro	·	2.0	U Tetra	chloroethene	· · · · · · · · · · · · · · · · · · ·	2.0 U
1,1-Dichloroethane	3	2.0	U Dibr	omochloromethane		2.0 U
Vinyl acetate		2.0	U Chlo	robenzene		2.0 U
2-Butanone (MEK)	,	2.0	U Ethy	lbenzene		2.0 U
cis-1,2-Dichloroeth	nene	2.0	U p/m-	Xylene		4.0 U
Chloroform		2.0	U o-Xy	lene		2.0 U
1,1,1-Trichloroetha		2.0	U Styre	ene		2.0 U
Carbon tetrachloric	le	2.0	U Bron	noform		2.0 U
Benzene		2.0	U 1,1,2	,2-Tetrachloroethan	e	2.0 U

cis-1.3-Dichloropropene and trans-1,3-Dichloropropene are reported to the method detection limit to meet reporting limits.

Surrogate	% Recovery	Acceptance Range (%)
Dibromofluoromethane	106	86-116
Toluene-d8	98	87-111
4-Bromofluorobenzene	96	79-112

U - The analyte was analyzed for but not detected at the sample specific level reported.



## Laboratory Control Sample Volatile Organics by GC/MS

Client: Project:

City of New Bedford

Sullivan's Ledge

Client ID:

Laboratory Control Sample

Case: Matrix: N/A SDG:

Water

Lab Code: MA00030

ETR: 0306034

Lab ID: VW060903L14

Associated Blank: VW060903B17

Concentration Units: µg/L

Date Collected	Date Received	Date Analyzed	Sample Amount (ml)	Final Volume (ml)	Dilution Factor	Analyst
N/A	N/A	06/09/03	5	5	1	MLB

Domomotor			% Recovery
Parameter	Conc.	% Recovery	Limits
Chloromethane	21	106	70-130
Vinyl chloride	22	112	70-130
Bromomethane	18	91	70-130
Chloroethane	25	123	70-130
Trichlorofluoromethane	30	150 <sup>a</sup>	70-130
1,1-Dichloroethene	22	108	70-130
Acrolein	13	. 64ª	70-130
Acetone	22	109	70-130
Carbon disulfide	22	111	70-130
Methylene chloride	20	98	70-130
Methyl tert-butyl ether (MTBE)	21	103	70-130
trans-1,2-Dichloroethene	21	104	70-130
1,1-Dichloroethane	23	113	70-130
Vinyl acetate	24	. 118	70-130
2-Butanone (MEK)	19	94	. 70-130
cis-1,2-Dichloroethene	22	108	70-130
Chloroform	21	107	70-130
1,1,1-Trichloroethane	22	108	70-130
Carbon tetrachloride	22	110	70-130
Benzene	22	109	70-130
1,2-Dichloroethane	20	102	70-130
Trichloroethene	20	101	70-130
1,2-Dichloropropane	21	107	70-130
Bromodichloromethane	21	107	70-130
2-Chloroethylvinyl ether	20	99	70-130
Methyl isobutyl ketone (MIRK)	19	99	70-130
cis-1,3-Dichloropropene	22	108	70-130
Toluene	21	108	
trans-1,3-Dichloropropene	22		70-130
1,1,2-Trichloroethane	22	107	70-130
2-Hexanone	20	110	70-130
Tetrachloroethene		98	70-130
Dibromochloromethane	21	104	70-130
Dibromocniorometnane	. 22	108	70-130



## Laboratory Control Sample Volatile Organics by GC/MS

Client: Project:

City of New Bedford

Sullivan's Ledge

Client ID: **Laboratory Control Sample** N/A

ETR: 0306034

Lab ID: VW060903L14

Lab Code: MA00030

Associated Blank: VW060903B17

Matrix: Water

Case:

Concentration Units: µg/L

•		I	Sample	Final		
Date Collected	Date Received	Date Analyzed	Amount (ml)	Volume (ml)	Dilution Factor	Analyst
N/A	N/A	06/09/03	5	5	1	MLB
	***************************************					

Parameter	Conc.	% Recovery	% Recovery Limits
Chlorobenzene	20	102	70-130
Ethylbenzene	20	100	70-130
p/m-Xylene	42	104	70-130
o-Xylene	20	102	70-130
Styrene		99	70-130
Bromoform	21	106	70-130
1,1,2,2-Tetrachloroethane	22	108	70-130

·		Acceptance
Surrogate	% Recovery	Range (%)
Dibromofluoromethane	104	86-116
Toluene-d8	101	87-111
4-Bromofluorobenzene	98	79-112

<sup>a</sup> - Value outside of QC Limits. N/A - Not Applicable

Concentrations reported as calculated values, which includes rounding for significant figures. Percent recoveries and RPD values are calculated from the unrounded result.

### Polychlorinated Biphenyls by GC/ECD



Client:

City of New Bedford

Project:

Client ID:

Matrix:

Sullivan's Ledge

Case:

N/A

SDG:

N/A

Final Eff.

Water

Lab Code: MA00030

ETR: 0306034

Lab ID: 0306034-01

Associated Blank: PW060603B08

Concentration Units: µg/L

Data Callagted	Data Bassissad	Data Fatanata di	D. 4. A 1	Sample	Final	D1 D	
Date Collected	Date Received	Date Extracted	Date Analyzed	Amount (ml)	Volume (ml)	Dilution Factor	Analyst
06/04/03	06/04/03	06/06/03	06/12/03	980	10	1 .	NLJr

Parameter	Result
Aroclor 1016	0.51 U
Aroclor 1221	0.51 U
Aroclor 1232	0.51 U
Aroclor 1242	0.51 U
Aroclor 1248	4.0
Aroclor 1254	0.51 U
Aroclor 1260	0.51 U

		Acceptance
Surrogate	% Recovery	Range (%)
Tetrachloro-meta-xylene	76	30-150
Decachlorobiphenyl	41	30-150

U - The analyte was analyzed for but not detected at the sample specific level reported. N/A - Not Applicable



#### Quality Control Results Polychlorinated Biphenyls by GC/ECD

Client: City of New Bedford

Project: Sullivan's Ledge

Case: N/A SDG:

Client ID: Method Blank

Matrix: Water

Lab Code: MA00030

ETR: 0306034

Lab ID: PW060603B08

Associated Blank: N/A

Concentration Units: µg/L

	·			Sample	Final		
Date Collected	Date Received	Date Extracted	Date Analyzed	Amount (ml)	Volume (ml)	Dilution Factor	Analyst
N/A	N/A	06/06/03	06/11/03	1000	10	1	NLJr

N/A

Parameter	Result
Aroclor 1016	0.50 U
Aroclor 1221	0.50 U
Aroclor 1232	0.50 U
Aroclor 1242	0.50 U
Aroclor 1248	0.50 U
Aroclor 1254	0.50 U
Aroclor 1260	0.50 U

		Acceptance
Surrogate	% Recovery	Range (%)
Tetrachloro-meta-xylene	82	30-150
Decachlorobiphenyl	79	30-150

U - The analyte was analyzed for but not detected at the sample specific level reported.



## Laboratory Control Sample Polychlorinated Biphenyls by GC/ECD

Client: City of New Bedford

Project: Sullivan's Ledge

Case:

N/A

N/A

Client ID: Laboratory Control Sample

SDG:

Matrix: Water

Lab Code: MA00030

ETR: 0306034

Lab ID: PW060603L05

Associated Blank: PW060603B08

Concentration Units: µg/L

:			
Date Collected	Date Received	Date Extracted	Analyst
N/A	N/A	06/06/03	NLJr

Parameter	Conc.	% Recovery	% Recovery Limits
Aroclor 1016	10	104	70-130
Aroclor 1260	. 10	104	70-130

•		Acceptance
Surrogate	% Recovery	Range (%)
Tetrachloro-meta-xylene	79	30-150
Decachlorobiphenyl	82	30-150.

N/A - Not Applicable

Concentrations reported as calculated values, which includes rounding for significant figures. Percent recoveries and RPD values are calculated from the unrounded result.

#### **Total Metals**



Client:

City of New Bedford

Project:

Sullivan's Ledge

•

Case: Client ID: Matrix: N/A SDG: Final Eff.

Water

N/A

Concentration Units: µg/L Date Collected: 06/04/03

Lab Code: MA00030

ETR: 0306034 Lab ID: 0306034-01

Date Received: 06/04/03

Parameter	Result	Oualifier	Reporting Limit	Dilution	Date Analyzed	Date	Analytical Method	. A
	ICJUIC	Quanner	Limit	Dilution	Analyzeu	Prepared	Metnod	Analyst
Arsenic	200	U	200	1	06/23/03	06/18/03	200.7	LCP
Cadmium	10	U	10	1	06/23/03	06/18/03	200.7	LCP
Chromium	20	U	20	ı	06/23/03	06/18/03	200.7	LCP
Copper	20	U	20	1	06/23/03	06/18/03	200.7	LCP
Lead	200	U .	200	1	06/23/03	06/18/03	200.7	LCP
Mercury	0.20	U	0.20	1	06/20/03	06/18/03	7470A	CAF
Molybdenum	100	U	100	1	06/23/03	06/18/03	200.7	LCP
Nickel	40	U	40	1	06/23/03	06/18/03	200.7	LCP
Silver	20	U	20	1	06/23/03	06/18/03	200.7	LCP
Zinc	36		20	1	06/23/03	06/18/03	200.7	LCP

 $\boldsymbol{U}$  - The analyte was analyzed for but not detected at the sample specific level reported. N/A - Not Applicable



#### Duplicate Quality Control Results Total Metals

Client: Project:

City of New Bedford Sullivan's Ledge

Case:

N/A SDG:

N/A

Client ID: Matrix:

Final Eff. Water Lab Code: MA00030

ETR: 0306034

Lab ID: 0306034-01 DUP

Concentration Units: µg/L Date Collected: 06/04/03

Date Received:

Parameter	-	Sample Result			te	Percent RPD	RPD Limit	
Arsenic	200	U		200	Ū	N/A	20	
Cadmium	. 10	U		10	U	N/A	20	
Chromium	20	U		20	U	N/A	20	
Copper	20	U		20	U	N/A	20	
Lead	200	U		200	Ū.	N/A	. 20	
Mercury	0.20	U		0.20	U	N/A	20	
Molybdenum	100	U		100	U	N/A	20	
Nickel	40	U		40	U	N/A	20	
Silver	20	U		20	IJ	N/A	20	
Zinc	36			36		2	20	

 $\boldsymbol{U}$  - The analyte was analyzed for but not detected at the sample specific level reported.  $N\!/A$  - Not Applicable

Concentrations reported as calculated values, which includes rounding for significant figures. RPD values are reported based on the unrounded calculated result.



# Matrix Spike Quality Control Results Total Metals

Client:

City of New Bedford Sullivan's Ledge

Project: Case:

Client ID:

Matrix:

N/A SDG:

N/A

Final Eff. Water Lab Code: MA00030

ETR: 0306034 Lab ID: See Below

Concentration Units: µg/L

Date Collected: 06/04/03

Date Received:

I ah ID:

0306034-01

0306034-01

Lau ID.	0306034-01	0306034		
	Sample	Matrix S	% Recovery	
Parameter	Conc.	Conc.	% Recovery	Limits
Arsenic	200 U	960	96	75-125
Cadmium	10 U	430	87	75-125
Chromium	20 U	970	97	75-125
Copper	20 U	920	92	75-125
Lead	200 U	890	89	75-125
Mercury	0.20 U	7.7	96	75-125
Molybdenum	· 100 · U · · · · · ·	950	95	75-125
Nickel	40 U	920	92	75-125
Silver	20 U	410	103	75-125
Zinc	36	930	89	75-125

 $\boldsymbol{U}$  - The analyte was analyzed for but not detected at the sample specific level reported.  $N\!/A$  - Not Applicable

Concentrations reported as calculated values, which includes rounding for significant figures. Percent recoveries and RPD values are calculated from the unrounded results.



#### Preparation Blank Quality Control Results Total Metals

Client:

City of New Bedford Sullivan's Ledge

Project: Case:

SDG:

N/A

Client ID: Matrix:

**Preparation Blank** 

Water

Lab Code: MA00030

ETR: 0306034

Lab ID: MW061803B09

Concentration Units: µg/L

Date Collected: N/A

Date Received: N/A

Damamatan	D14	0	Reporting	<b>7</b>	Date	Date	Analytical	
Parameter	Result	Qualifier	Limit	Dilution	· Analyzed	Prepared	Method	Analyst
Arsenic	200	U	200	-1	06/23/03	06/18/03	200.7	LCP
Cadmium	10	U ·	10	1	06/23/03	06/18/03	200.7	LCP
Chromium	20	U	20	.1	06/23/03	06/18/03	200.7	LCP
Copper	20	U	20	1 .	06/23/03	06/18/03	200.7	LCP
Lead	200	U	200	i ·	06/23/03	06/18/03	200.7	LCP
Molybdenum	100	U	100	1	06/23/03	06/18/03	200.7	LCP
Nickel	40	U	40	. 1	06/23/03	06/18/03	200.7	LCP
Silver	20.	U	20	1	06/23/03	06/18/03	200.7	LCP
Zinc	20	U	20	1	06/23/03	06/18/03	200.7	LCP

U - The analyte was analyzed for but not detected at the sample specific level reported. N/A - Not Applicable



### **Preparation Blank** Quality Control Results Total Metals

Client: Project:

City of New Bedford Sullivan's Ledge

Case:

N/A

Client ID: Matrix:

SDG: **Preparation Blank** 

Water

Lab Code: MA00030

ETR: 0306034

Lab ID: MW061803B10 Concentration Units: µg/L

Date Collected: N/A

Date Received: N/A

			Reporting		Date	Date	Analytical	
Parameter	Result	Qualifier	Limit	Dilution	Analyzed	Prepared	Method	Analyst
Mercury	0.20	U	0.20	1	06/20/03	06/18/03	7470A	CAF

U - The analyte was analyzed for but not detected at the sample specific level reported. N/A - Not Applicable



#### Laboratory Control Sample Quality Control Results Total Metals

Client: Project:

City of New Bedford
Sullivan's Ledge

Case: Client ID:

N/A SDG:

N/A

Matrix:

**Laboratory Control Sample** 

Water

Lab Code: MA00030

ETR: 0306034

Lab ID: MW061803L02 Concentration Units: µg/L

Date Collected: N/A
Date Received: N/A

Parameter	Conc.	% Recovery	% Recovery Limits
Arsenic	890	89	80-120
Cadmium	420	83	80-120
Chromium	930	93	80-120
Copper	870	87	80-120
Lead	870	87	80-120
Molybdenum	890	89	80-120
Nickel	860	86	
Silver	390	97	80-120
Zinc	840	84	80-120



#### Laboratory Control Sample Quality Control Results Total Metals

Client:

Project:

Case: Client ID: Matrix: City of New Bedford Sullivan's Ledge

N/A SDG: N/A
Laboratory Control Sample

Water

Lab Code: MA00030

ETR: 0306034

Lab ID: MW061803L03 Concentration Units: μg/L

Date Collected: N/A
Date Received: N/A

				% Recovery
Parameter	 	Conc.	% Recovery	Limits
Mercury		8.1	101	80-120



#### **Blank Inorganics**

Client:

City of New Bedford Sullivan's Ledge

Project:

N/A

SDG:

N/A

Client ID: Blank Matrix:

Case:

Water

Lab Code: MA00030

ETR: 0306034

Lab ID: WW061103B13

Date Collected: N/A

Date Received: N/A

			Reporting		Date		Analytical			
Parameter	Result	Qualifier	Limit	Dilution	Analyzed	Unit	Method	Analyst		
Cyanide, Total	0.005	Ŭ	0.005	1	06/11/03	mg/L	9014	JAD		

N/A - Not Applicable

 $\boldsymbol{U}$  - The analyte was analyzed for but not detected at the sample specific level reported.



### Laboratory Control Sample Inorganics

Client:

City of New Bedford Sullivan's Ledge

Project:

N/A SDG:

N/A

Client ID:

Case:

**Laboratory Control Sample** 

Matrix: Water

Lab Code: MA00030

ETR: 0306034

Lab ID: WW061103L09

Date Collected: N/A

Date Received: N/A

			% Recovery
Parameter	Conc.	% Recovery	Limits
Cyanide, Total	0.094	94	85-115

N/A - Not Applicable

Concentrations reported as calculated values, which includes rounding for significant figures. Percent recoveries and RPD values are calculated from the unrounded results.

### **Chain-of-Custody Record**

375 Paramount Drive Raynham, MA 02767

TEL: (508) 822-9300 FAX: (508) 822-3288

0306034 PAGE 1 OF 1

120	COMPANY INFOR	RMATION		co	MPANY'S PRO	JECT INFOR	INFORMATION SHIPPING INFORMATION SAMPLE CONT				CONT	TAINERS (NOTE 4)					
Address: U	N 6F NEW SHAWMUT 575 579 528 961	). T AVO 3274( ~153 -305	( ( 1)	For the Project Project P.O. #	latory Protoco le State of: ct Name: Suct Number: ler Name(s): 4  (TAT IS IN BUSIN RCLE TAT: 1	LIVANS	(tyci	Carrier: Airbill Number:  Date Shipped:  Quote #:  3 Day 48 Hr	(IF OTHER NOT 24 Hr Othe	E BELOW)	VOLUME CONTAINER PRESERVATIVE	LITE 18UTS   -	Sol Phon Hous	The Phone North	1045   61155   HEC		
WHG LAB#	SAMPLE ID (N	OTE 1)	COL DATE	LECTION TIME	COMPOSITE OR GRAB	MATRIX	AN	IALYSIS/REMARKS (N	OTES 2, 3)	SAMPLER INTIALS		N	UMBE	R OF	CONT	AINER	ls Is
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